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ABSTRACT

The percentage of adults aged 65 years or older is expected to increase from 12 percent of the population in 1980 to more than 21 percent by the year 2030. Since many adults stay involved with learning activities well into their 80s and 90s, educational organizations have a great opportunity to supply learning activities to this population. To take advantage of this opportunity, adult educators need to understand both the uniqueness of these older adults and the barriers they face. These unique characteristics and challenges can be organized into four categories: (1) physical challenges (changes in vision, hearing, muscular system); (2) cognitive challenges (decreased short-term memory, decreased ability to think abstractly, decreased level of concentration, and increased reaction time); (3) life-stage challenges, including loss of identity, self-confidence, and independence; changes in roles because of retirement; loss of spouse and close friends; life patterns and reasons for learning; role and effect of past education; and society's view of older adults and education; and (4) other barriers, such as inadequate transportation, fear of criminal elements, lack of encouragement at home, fear of new technologies, and lack of new technologies at home. Strategies to overcome these barriers and increase educational participation by older adults include recruiting "educational buddies" to support new students, having instructors touch base with students to provide encouragement, creating programs that emphasize fun in learning new technologies, and promoting available facilities, such as free computer laboratories. (Contains 10 references.) (KC)

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The Impact of Aging on Education

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INTRODUCTION

Some facts to consider. The percentage of older adults of 65 years of age and up is expected to increase from 12% of the population in 1980 to over 21% by the year 2030. [1] It has been determined that many adults keep involved with learning activities well into their eighties and nineties.[2] Reading fulfills many purposes in an older adult's life by offering opportunities for social interactions, participation in community events, entertainment, enhancing self-esteem, intellectual stimuli, increased quality of life and a way to overcome problems. [3] This fact about reading when combined with the increase in population and the statistic on learning activities, offers educational organizations and institutions a great opportunity. To take advantage of this opportunity, I feel there is a great need to understand both the uniqueness and the barriers faced by adults of retirement age and on. These unique characteristics and challenges can be broken down into four categories: 1) physical challenges 2)cognitive challenges 3)life stage challenges and 4)other obstacles. By understanding the uniqueness of this category of learner, keeping in mind that not all older adults are exactly the same, organizations and institutions will further increase the participation of this group in education. Thus, increasing the organization's success not only on an educational level but on a financial level as well. This paper will expand on the characteristics and challenges faced by this population group and suggest ways to both accommodate and/or remove these challenges.

PHYSICAL CHALLENGES

As adults age their bodies begin to change. Changes in older adults often take in a persons vision, hearing, muscular system and other senses. These changes can create barriers to learning. If an older individual is not comfortable in the learning setting, the less likely they will be to continue to participate in education. By making accommodations in the educational setting for these physical challenges, this will not only retain older participants but will also play a roll in increasing future participation and participants.

Vision Challenges

The older adult can face a number of visual challenges which can if not accommodated in the learning environment can leave an older adult discouraged and frustrated. As a person ages the

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[1] Boyd, M., Nussbaum, J., & Weinrich, S.P, "Continuing education adapting strategies to teach the elderly," Gerontological Nursing, November 1989, p.17.

[2] Tuijnman, A. (Ed.) & van der Kamp, M. (Ed.). Learning across the lifespan, theories, research and policies. (New York: Pergamon Press 1992). p.55.

[3] Smith, M. C., "The reading abilities and practices of older adults," Educational Gerontology 1993, Vol 19 p:424.

ability to read fine details decreases. There is also a noticeable decrease in both depth perception and the ability to identify the difference between blue, violet and green. The lens of the eye becomes thicker and yellow thereby reducing the amount of light travelling to the retina. Also, William (1990) found that an individual with declined vision is more likely to have difficulty in remembing newly acquired information, which will add to the frustration faced by the older learner.[4] Although some of these challenges can be overcome by surgical methods such as laser, here are a few other suggestions on how we can aid the older learner in overcoming these barriers: be sensitive to their visual needs by encouraging learners to move closer to the front, slow down the commencement of the class presentation to allow the older adults eyes to adjust to the light change from outdoors, ensure that all the lights in the room are working to obtain the maxium amount of light, consider the older adults lighting needs in the design of a new educational center, allow a few lights to be on during overhead presentations, provide handouts of the overheads and have available by the class entrance magnifying sheets to help increase the text size of both the handouts and textbook. By implementing some of these suggestions this will make the older adult learner more comfortable, help increase the effectiveness of his/her vision and thereby increase the quality and enjoyment of the learning experience.

Hearing Challenges

The older adult can experience changes in their ability to hear. As with vision, this challenge can also lead to a decreased rate of participation in education. The older adult's hearing changes so that they are often unable to discriminate between different sounds, and the ability to hear high frequency/pitch sound is reduced. In additional to the challenges mentioned above, William's (1990) study found that the loss of hearing appears to be closely associated with long term memory problems, which will also add to this individual frustration.[5] In order to help enhance the hearing of the older student, instructors could encourage individuals to sit closer and to ensure that those with hearing aids sit as close as possible. Closing the door to the class will help reduce outside noise and thus reducing the number of items the ear needs to hear. The hearing of the older learner can also be enhanced by facing the class and speaking clearly. This will help the sound wave travel a more clear path and allow for some lip reading, instead of being obstructed by the instructors body if the instructor has his/her back to the class. Finally the use of visual aids can help compensate for the lack of hearing. Using the methods listed above should help to overcome some of the barriers to learning faced by older adults with hearing

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[4]Tuijnman, A. (Ed.) & van der Kamp, M. (Ed) Learning across the lifespan, theories, research and policies (New York: Pergamon Press 1992) p.54.

[5]Tuijnman, A. (Ed.) & van der Kamp, M. (Ed) Learning across the lifespan, theories, research and policies (New York: Pergamon Press 1992) p.54.

challenges. These methods will not only help the student but also the institution as enrollment with increase with satisfied, happy students.

Muscular System and Other Physical Challenges

Some other physical challenges faced by the older adult include both muscular challenges, a decreased energy level and a decreased sense of temperature and thirst. The muscular challenges faced include: decreased muscle tone and reduced mobility. To help the older student feel more comfortable the educational facility could ensure that the desks are comfortable and that chairs if used have arms to help the individual get up. Widely space furniture will aid in providing lots of room to move. The general reduction of energy has also been noted in many research sources as a challenge faced by older adults. This reduced energy level is often more noticeable in the evening. Offering a larger variety of classes during the day at the institutions, by correspondence, TV and interet would provide the older adult with a variety of subjects, time slots and location alternatives. The final two physical challenges covered in this section are the decreased sense of temperature and thirst. To helpover come the temperature sensitivity the instructor should ensure that the classroom is at the right temperature for the majority of students. The instructor should then do their best to encourage others to bring additional clothes as the classroom can get cool and encourage movement to different parts of the room away from windows etc. to help overcome cold drafts. To overcome the decreased sense of thirst and to keep the students hydrated the instructor could have a pitcher of water at the back with glasses and some encouragement to take a drink at the break would be helpful to all students. Thus, by following and implementing some of the suggestions above this will help overcome some of the effects of the muscular and other physical difficulties faced by the older adult. Increasing the concentration and focus on learning by helps the individual to be in a comfortable environment conducive to learning.

By implementing some, if not all of these strategies we help the older student to overcome or reduce the effects of the first of the four challenges facing the older learner. By addressing the physical challenges of the older learner and thereby making the individual comfortable in the learning environment they will better able to enjoy the learning experience.

COGNITIVE CHALLENGES

The second challenge faced by older adults is due to a change in some cognitive skill levels. The cognitive challenges faced are: decreased short term memory, decreased ability to think abstractly, decreased level of concentration and increased reaction time. These cognitive challenges can lead to frustration in older adults as they have difficulty in retaining what they have learned. However, it must be noted that some researchers have found that the ability to learn and remember can be as good as ever it these needs are addressed.[6] This, indicates the

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[6]Boyd, M., Nussbaum, J., & Weinrich, S.P, "Continuing education adapting strategies to teach the elderly,"

importance of finding ways in the teaching environment to be sensitive to and to address these needs. The one way to aid the older learner is to allow more time for the student to respond to class questions. Being organized to provide written outlines and hand outs can also help the older student to organize the new information as well as provide a written document for later reviews. Repetition of material in a few different ways for example, both verbal and through overheads at a reasonable pace, would also help the older adult as it allows the time for the individual to catch the material more than once. Since older adults have a wealth of experience to draw from, using common situational examples and analogies is helpful to illustrate new concepts. The last suggestion would be to include at the beginning of the class or to offer before the first class a short one hour information session in mnemonics and other memory techniques. This would not only be helpful to the older adults taking education but it might also help with everyday challenges faced by this group. Providing such a class to both enrolled students and other interested individuals may increase both retention of enrolled students but also increase enrollment by re-introducing the older learner to the educational institution and the social aspects of such an institution. The cognitive challenges if addressed by the instructor in the ways listed above will help the educational institutions reduce the effects of these challenges faced by older adults. In addressing this, the educational institution would attract more students from this segment thus capitalize on the future opportunity provided by this increasing population segment.

LIFE STAGE CHALLENGES

The older adult segment of the population experiences some unique life event challenges which are different from other adult segments. In this paper, we will examine six components of the older adults life stage. The six components are: 1)loss of identity, self confidence and independence, 2)change in roles due to retirement 3)life event of loss of spouse and close friends 4)set life patterns and reasons for learning 5)role and effect of past education and 6)societies view of older adults and education. These challenges can in some cases encourage these individuals to seek out educational opportunities and in other cases discourage education. By understanding the above life stages and challenges often unique to older adults, we can better tailor our educational courses and programs to attract this growing population segment.

Loss of Identity, Self Confidence and Independence

Various researchers have highlighted reasons why these three losses are experienced by older adults. Here are some of the explanations I found in my research. "Urbanization, industrialization, beauracratization, increased leisure time, enhanced life expectancy are some of the factors that leave the aged with little of any consequence to do in society".[7] The self concept

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Gerontological Nursing, November 1989, p.20.

[7]Hagedorn, R., Sociology, (Toronto 1986: Hold Rinehart and Winston of Canada) p.141

and self confidence decreases as a person experiences various declines in personal abilities and skills.[8] Society often assumes that they understand the concerns of older adults and that often they expect them to relate the subject of death when really older adults greatest concerns are financial and avoiding dependency.[9] It must be noted that most older adults have worked their whole life to achieve the goals of both financial and personal independence. From the above examples we can see some of the reasons why older adults feel the way they do. These feelings and their reasons often create barriers to participation in education. As those adults who do not feel they have identity or self confidence likely will feel that they will not be successful in a particular course. However, the strive for independence can work against these two feelings by providing a reason to obtain further education. Considering the ideas presented above, these adults could be encouraged to take and enroll in adult education by the following method and ideas:

- to help the older individual find their identities, emphase that all persons involved in the learning process are both learners and students - with an emphasis on the important life skills they bring to class and what a great contribution that can make
- the instructor should be positive and should foster a positive learning environment by being supportive, encouraging and available to help the students at a variety of times perhaps both before and after class, as well as by phone, email and fax
- the instructor should promote self confidence and worth by encouraging each individual to contribute to the class and for each contribution treating that individual with respect, without judgement and with a focus on highlighting the positive points of each contribution
- by getting to know each student through a coffee time before class will also make the student feel more at ease and allow them the opportunity to meet others in the same situation
- by helping incorporate the ideas relating to both the physical and cognitive challenges of the older individual expressed earlier will help the older adult boost their self confidence and their feeling of independance, by showing them that many of these reduced abilities due to aging can be overcome
- these students should also have some input into the course through suggesting what they are hoping to get out of the course and incorporating these suggestions into the course outline - this will help give the older students a feeling of some independence and control over the learning situation
- offering seniors discounts, senior scholarships and providing a free course if they encourage five others to enroll in a particular class that they have already taken will attract older adults as it helps to reduce some of the financial concerns of this population segment

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[8]Tuijnman, A. (Ed.) & van der Kamp, M. (Ed.), Learning across the lifespan, theories, research and policies (New York (1992) Pergamon Press) p.57.

[9]Knox, A.B., Strengthening adult and continuing education, (San Francisco: MaxwellMcGraw-Hill Book(1993)). p. 319.

Thus, by understanding some of the reasons behind the older adults feeling of loss of identity, self confidence and independence and implementing these ideas will help to address some of the reasons why older adults feel the way they do. As well, it will encourage older adults to participate in education.

Role Changes: Retirement and Loss of Spouse

The second component of life stage challenges is related to role changes experienced by older adults. The first of the two role changes to be discussed in this paper is the role of retiree. This life event has a number of characteristics which could influence the retired individual to seek educational opportunities. These characteristics include the time, a more open time schedule and often a large number of interests they want to explore. In addition to these characteristics, due to the increasing healthiness of retirees, an increasing number of individuals are seeking to move to new part-time employment and hobby business after retiring from their major occupations. Many of these part-time and hobby businesses require the retiree to learn more about a subject or previous interest. Thus, we can see that older adults retiring have a lot of characteristics that can help encourage them to seek educational opportunities. This combined with the increased number of population will create a large amount of demand. By making information on the varieties of courses readily available by a number of different media forms like radio, TV, free seminars, newspaper, and internet will help ensure that these individuals are aware of the courses offered and attract them to a specific institution that meets their interests. Also, discounts as mentioned above for seniors, scholarships and volume incentives, combine with a back to school education seminar (i.e., studying habits, paper writing, memory skill etc.) could also encourage the older adult to attend a specific facility. Thus, we can see that the first roll change of retirement has a great potential for the educational institution.

The second roll change to be discussed in this paper is the loss of a spouse or close friends. Although this can happen with younger adults, the frequency of death of a close friend or spouse is still higher for older adults despite medical advancements. These losses can leave an individual feeling quite alone. Educational courses can provide this individual with an opportunity to meet new individuals who are often in the same situation and have similar interests. According to Sociology, one of the major predictions for happiness later in life is both interactions with other people and supportive interactions.[10] By helping to make older adults aware of the offering of various educational opportunities, having instructors that are supportive and encouraging can attract these older learners. Not only can we attract them to education but through new social interactions help them to find new happiness in these new life roles of both retiree and widow(er).

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[10]Hagedorn, R., Sociology. (Toronto: Hold Rinehart and Winston of Canada (1986)) p.161

Life Set Patterns and Reasons for Learning

The older learner is at a different point in their life than some of the other adult categories. The older learner often is not looking to get a new degree, a new career or educating for the purpose of advancement at work. The older learner's motivations for learning include: to broaden interest, for the joy of learning, meet new social contracts, or to pursue a long standing hobby.[11] In addition to having different reasons for learning, these individuals come with a well developed set of lifestyle habits and knowledge. This requires that the instructor respect this vast knowledge and be aware that this often create a barrier as the older individual often has habits and ideas that have served him/her well over their lifetime. In order to help that individual learn or want to attend the following suggestions can attract the older learner:

- new ideas must be tied to situations and examples the older individual can relate to
- ideas are easily learned if they are practical ideas and if the usefullness of these ideas can be demonstrated
- courses offered should consider the reasons listed above for learning for example offering a sampler session container six sessions of one hour each on a topic from each of the univerities faculties
- reading material should be handed out or reading should be included in the course as studies have found that this is the learning style older adults are more comfortable with[12]
- offer a wide variety of classes with a social component, not just distance courses or self taught computer programs - as research has found that older adults prefer learning in a highly social atmosphere in the company of others[13]

Thus, by taking into account the unique characteristics of the older learners' set life patterns and reasons for learning, the fourth challenge in the life stage challenges, in the ways listed above will aid in attracting this adult category to education.

Role of Past Education

The fifth element of the older persons life stage is the role past education plays in encouraging these adults to seek educational opportunities when they reach their fiftyfive plus ages. Many sources of educational research confirm the link between early education and it effects of adults enrollment in education later in their life. Here are a few examples of their findings. Learning levels correlated to the amount of education completed earlier in life has the effects of producing more varied interests, more subject interests and more learning as the desire to learn arises from the habit of learning.[14] Data showed that education acquired in early years of life is found to

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[11] Fugate, M. & Lamdin, L., Elderlearning new frontier in an aging society. (Phoenix: Oryx Press(1997)). p.75
[12] Fugate, M. & Lamdin, L., Elderlearning new frontier in an aging society. (Phoenix: Oryx Press(1997)). p.77
[13] Fugate, M. & Lamdin, L., Elderlearning new frontier in an aging society. (Phoenix: Oryx Press(1997)). p.77
[14] Fugate, M. & Lamdin, L., Elderlearning new frontier in an aging society. (Phoenix: Oryx Press(1997)). p.76

exert important effects upon lifestyle in later years.[15] "Prior level of education is found to be of considerable importance in determining the probabilities that elderly people will make use of adult education facilities".[16] These findings have two different implications depending if you are looking at the current older population or the future older population. The first implication is that currently the overall education level of the elderly person is less than the population as a whole. [17] What this means is that the upper segment of the current population over fifty-five are less likely to participate in education and thus, require more encouragement to attract them to even register for a course. This encouragement could be through such programs as community learning tours. These adults would have a bus tour around the community and learning about such things as nature and architecture. Using this opportunity to spark interest and to promote learning more about these subjects through classes. Also, having special open houses for this group including pointing out the benefits of education to them, as well as having a testimonial by an individual in their age group. The second future implication is a dramatic increase in the demand for older adults education once the baby boomer population fully hits this segment of the adult population. This impact shifts the focus from not only attracting these individuals to a specific institution but keeping them and having the amount of resources required to handle the increased demand. This could include: proper ordering of the right number textbooks, enough computers, course flexibility to meet changing demands and interest and contant requests for feedback on courses, new course topics, and campus facilities. Offering discounts for early enrollment will help to get an idea of the resources required for the different programs offered. Group study exchanges where an older adult is paired with a peer in another country spending time at learning insitution in both lands would offer a unique program that would help distinguish the instution from other Thus, by understanding the effects of prior education on older adults this can help the organization to better understanding the uniqueness of the life stage. Thereby, helping to it understand how to attract these older adults.

Societies Views of Older Adult Education

The last of the life stage challenges is the effects of the views held by society on older adults and education. At one time and still evident somewhat today are the ideas that: 1) older people are not expected to further their education 2)education is about children in schools 3)education has no place in the lives of older people and 4)that older people cannot learn new things. These views I believe are not correct. Some research in this area have drawn such conclusions as "human beings regardless of age are engaged in continuous striving for adequacy, self-enhancement, and self fulfillment - this is important for the elderly due to negative attitudes

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[15]Dention, F.T. , Pineo, P.C. , & Spencer, B.G. "Participation in adult education by the elderly: a multivariable analysis and some implications for the future". Canadian Journal on Aging, Spring 1998, p. 15.

[16]Dention, F.T. , Pineo, P.C. , & Spencer, B.G. Participation in adult education by the elderly: a multivariable analysis and some implications for the future. Canadian Journal on Aging, Spring 1998, p. 4.

[17]Boyd, M., Nussbaum, J., & Weinrich, S.P, "Continuing education adapting strategies to teach the elderly," Gerontological Nursing, November 1989, p.20.

society holds towards aging and obstacles placed in their way".[18] These such findings when accompanied with a growing acceptance of the benefits of continued learning for maintaining a healthy active mind, body and spirit will help to change these old views. Also, by helping to remove or compensate for some of the other obstacles older adults face mentioned in this paper, will aid in changing these views. Another way to change these views is to include information on successful older adults in promoting the institutions programs. Encouraging discussion coffee groups, which meet once a week to discuss various topics related to courses offered at the learning institution. These groups would be made up of both older adults and young students. This would give the younger adult a better appreciation for how much older adults know, how much they can get out of education and a good example of how sucessful older adults can be in educational pursuits. Thus, we can see that there are ways to help overcome this last challenge of the older adults life stage.

By examining the six characteristics/challenges 1)loss of identify, self confidence and independence, 2)change in roles due to retirement 3)life event of loss of spouse and close friends 4)set life patterns and reasons for learning 5)role and effect of past education and 6)societies view of older adults and education, we can see that this population experiences some unique life event challenges which are different from other adult segments. By understanding the six challenges of life stage we can better create and maintain courses and institutions that will attract and retain this growing populations segment.

OTHER BARRIERS

In addition to the barriers discussed there are a few other obstacles that older adults face that can reduce their participation in education. These barriers are quite diverse. The barriers include: inadequate transportation, fear of criminal elements, lack of encouragement at home, fear of new technologies and lack of new technologies at home. Here are some ways to reduce the effects of these barriers on the older adult:

- to cover the concern of inadequate transportation offer classes at alternative locations such as at local malls, community centers or provide shuttle services from these locations to the classroom
- another way to cover inadequate transportation is to offer to conduct classes or seminars at an individuals home or another convient location if they can get together enough interested people
- providing well lit facility grounds, visible security guards, a security walking service to some of the criminal concerns

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[18]Wass, H. & West, C.A., A humanistic approach to education of older persons. Educational Gerontology, 1977 p. 413.

- often seniors families live in other geographical locations and a large number of seniors live alone - offering these "new students" a educational buddy who could provide support, encouragement and assist with questions about the learning facility etc.
- providing a call service in which the teaching assistant or instructor calls each new student at various times durring the course to talk to the student to provide encouragement, talk about how he or she is doing in the course and an opportunity to ask question in a one on one setting
- having teaching staff that encourage their students and who encourage and reward their students to encourage and support each other would also help
- older students often are afraid of new technology because they have not used it - having a fun hands on session offering prizes and technology miles which can collected to be used for free computer programs as incentives, could show through first hand experience how easy and fun the new technology basics can be
- promoting to older students the facilities available at the educational institutions such as writing tutors to help with writing paper etc and free computer labs for students to write their papers, try new technologies and including the fact that there is a support person on site to help with problems encountered
- these types of computer labs, although they could be smaller ones, available in a few different locations along with the classes would be beneficial

These suggestions will help to overcome the other barriers faced by older adults. By addressing these concerns of older learners this will increase the participation rate of this segment of the adult population.

CONCLUSION

With the rise in the older adult population moving to over 17% by 2025 and to 21% by 2030 and the statistic that when today's twenty year old reaches forty-five, one in five adults will be over sixty-five. This increase in the older segment of adults offers the educational institution a great opportunity. To take advantage of this opportunity the educational institution needs to attract and retain this large group of potential students. To do so, it is very important to understand the special characteristics of this group of adults and how these characteristics can affect this groups participation in education. These special characteristics/challenges, as outlined in this paper include: the physical challenges, cognitive challenges, lift stage challenges, and other obstacles. The successful institution will help the older adult overcome these challenges through the variety of suggestions in this paper, and thus will attract a large number of this growing population. Not only will the institution be successful but perhaps more importantly so will its students.

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